

REMARKS

In view of the above amendments and the following remarks, reconsideration of the objections and rejections, and further examination are requested.

Claims 1-10 were pending in this application and stand rejected. Claims 1-3 and 6-10 are amended herein, and claims 4 and 5 are canceled herein. No new matter has been added.

The specification and abstract have been carefully reviewed and revised to make grammatical and idiomatic improvements in order to aid the Examiner in further consideration of the application. A substitute specification and abstract including the revisions have been prepared and are submitted herewith. No new matter has been added. Also submitted herewith are marked-up copies of the substitute specification and abstract indicating the changes incorporated therein.

The drawings have been objected to by the Examiner. Specifically, the Examiner asserted that Figures 12 and 13 should be designated as --Prior Art-- because only that which is old is illustrated. The Applicants have amended Figures 12 and 13 to include the label --PRIOR ART--. New formal Figures 12 and 13 have been prepared and are submitted herewith, and include those changes detailed above.

Accordingly, the Applicants respectfully request withdrawal of the drawing objections.

The title of the invention has been objected to because it is not descriptive. Specifically, the Examiner asserted that a new title is required that is clearly indicative of the invention to which the claims are directed. The Applicants have amended the title herein to be --DEVICE FOR INCREASING THE EXECUTION SPEED OF A LINKED PROGRAM--.

Accordingly, the Applicants respectfully request withdrawal of the objection to the title.

Claims 1-6 have been rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Specifically, the Examiner asserted that claims 1-5 are non-statutory because they are directed to a “program product” that includes a signal holding medium that can be a transmission medium as defined in the specification. The Examiner suggested using “a storage medium.” Regarding claim 6, the Examiner asserted that it is non-statutory because it is directed to a “program linking program” or compilation of facts. . . without creating any functional interrelationship, either as part of the stored data or as part of the computing processes performed

by a computer. The Examiner suggested “A program linking program embodied on a computer storage medium.” Claims 1-6 have been amended to recite statutory subject matter.

Accordingly, the Applicants respectfully request withdrawal of the 35 U.S.C. § 101 rejection.

Claim 5 has been objected to because it appears that “at least one among” needs to be corrected to “at least between.” Claim 5 is canceled herein, thus rendering this objection moot.

Accordingly, the Applicants respectfully request withdrawal of the objection to claim 5.

Claim 9 has been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention. Specifically, the Examiner asserted that “the plural programs” as recited in line 3, lacks sufficient antecedent basis. Claim 9 has been amended to recite language having proper antecedent basis.

Accordingly, the Applicants respectfully request withdrawal of the 35 U.S.C. § 112, second paragraph, rejection of claim 9.

Claims 1-10 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Ishiwata (U.S. Patent Application Publication No. 2002/0016957) (hereinafter referred to as “Ishiwata”) in view of Fetzer et al. (U.S. Patent No. 6,832,302) (hereinafter referred to as “Fetzer”).

The above-mentioned rejection is inapplicable to amended claim 1 for the following reasons.

Claim 1 recites a program product including, in part, a program linking program recorded on a storage medium for causing a computer having a memory to function as linking means, storage means, and management means for causing the linking means to preferentially perform linking of a plurality of unlinked programs in a predetermined priority order and to a maximum limit, within a range in which overflow of a predetermined capacity of a memory does not occur, wherein the predetermined priority order is selected from at least one of: increasing order of frequency of use of each of the plurality of unlinked programs to create the plurality of linked programs; increasing order of size of each of the plurality of unlinked programs such that a program size of each of the plurality of linked programs is not always reduced; increasing order

of product of frequency of use of each of the plurality of unlinked programs to create the plurality of linked programs and a size of a corresponding one of the plurality of unlinked programs; decreasing order of time for linking each of the plurality of unlinked programs on execution; and decreasing order of execution frequency of each of the plurality of unlinked programs accompanying execution of the plurality of linked programs.

Ishiwata discloses an intermediate object linking method of linking a plurality of intermediate objects to form an executable object, and an intermediate object linking unit, and a linker unit and a compiler driving unit, and a storing medium technology for recording a program used to link the intermediate objects. An intermediate object linking unit 10 comprises a linking order forming section 11, an intermediate object linking order forming means, a linker starting section 12 as a linker starting means, a comparing section 13 as a comparing means, a storing section 14 as a storing means, and a repeating section 15 as a repeating means. The linking order forming section 11 forms the linking order by using a permutation algorithm and a genetic algorithm.

In Ishiwata a linker 17 executes the linking process such as the linking of the intermediate objects 16 based on one gene of a predetermined number that are formed first by the linking order forming section 11 to get the executable object 18. Then, the program size of the executable object 18 and the minimum value of the program size stored in the storing section 14 are compared with each other by the comparing section 13. When the program size is smaller than the minimum value, this program size is recorded as the minimum value and updated. Then, the linking order for this recorded program size is read out from the linking order section 11a, and then the linking order at this time is recorded in the storing section 14.

In contrast to the present invention, Ishiwata does not disclose the intermediate object linking unit 10 increasing the size of each of the plurality of intermediate objects 16 (i.e., unlinked programs) such that a program size of each of the executable objects 18 (i.e., the linked programs) is not always reduced. Instead, Ishiwata discloses that the executable objects 18 are always reduced. Moreover, there is no suggestion or disclosure in Ishiwata to modify the intermediate object linking unit 10 such that a program size of each of the executable objects 18 is not always reduced. In other words, Ishiwata does not disclose a program linking program

recorded on a storage medium wherein a predetermined priority order is selected from at least one of: increasing order of frequency of use of each of the plurality of unlinked programs to create the plurality of linked programs; increasing order of a size of each of the plurality of unlinked programs such that a program size of each of the plurality of linked programs is not always reduced; increasing order of product of frequency of use of each of the plurality of unlinked programs to create the plurality of linked programs and a size of a corresponding one of the plurality of unlinked programs; decreasing order of time for linking each of the plurality of unlinked programs on execution; and decreasing order of execution frequency of each of the plurality of unlinked programs accompanying execution of the plurality of linked programs, as recited in claim 1.

Fetzer is relied upon in the rejection as teaching a buffer overflow check to ensure sufficient memory space to accommodate data storage. Fetzer discloses a method of detecting buffer overflows using a fault containment wrapper. However, it is clear that Fetzer also fails to disclose or suggest the above-discussed features of the claimed program linking program as recited in claim 1.

Regarding claims 6-8 and 10, they are patentable over the references relied upon in the rejection for reasons similar to those set forth above in support of claim 1. That is, each of claims 6-8 and 10 requires a predetermined priority order that is selected from at least one of: increasing order of frequency of use of each of the plurality of unlinked programs to create the plurality of linked programs; increasing order of a size of each of the plurality of unlinked programs such that a program size of each of the plurality of linked programs is not always reduced; increasing order of product of frequency of use of each of the plurality of unlinked programs to create the plurality of linked programs and a size of a corresponding one of the plurality of unlinked programs; decreasing order of time for linking each of the plurality of unlinked programs on execution; and decreasing order of execution frequency of each of the plurality of unlinked programs accompanying execution of the plurality of linked programs.

Because of the above-mentioned distinctions, it is believed clear that claims 1-3 and 6-10 are patentable over the references relied upon in the rejection. Furthermore, it is submitted that the distinctions are such that a person having ordinary skill in the art at the time of invention

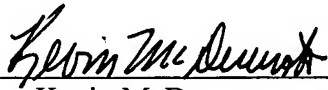
would not have had a reason to make any combination of the references of record in such a manner as to result in, or otherwise render obvious, the present invention as recited in claims 1-3 and 6-10. Therefore, it is respectfully submitted that claims 1-3 and 6-10 are clearly allowable over the prior art of record.

In view of the foregoing amendments and remarks, all of the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action are respectfully solicited.

Should the Examiner believe there are any remaining issues that must be resolved before this application can be passed to issue, it is respectfully requested that the Examiner contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

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